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Time: 01 pm.

MPHYCC-10 Atomic & Molecular Physics laser

Very Good afternoon, All of you. In the last class we have discussed the whole course structure and details of units of paper PHYCC-10. along with J.J. Thomson's concept for atoms.

Today I will discuss the examination paper pattern for MPHYCC-10 → Total 100 marks → 30 continuous internal assessment (CIA) + 70 End semester examination (ESE)

Continuous internal assessment (CIA) → 30 marks.
Mid Semester test → 02 each of 7.5 marks, 02 × 7.5 = 15 marks
Paper pattern for mid semester test →
Group A → multiple choice type – 03 each of 0.5 marks 03 × 0.5 = 1.5 marks
Group B → short answer type – 02 each of 1.5 marks 02 × 1.5 = 3.0 marks
Group C → Long answer type – 01 of 03 marks 01 × 3.0 = 3.0 marks
7.5 marks
2 × 7.5 = 15 marks.

Assignment 05 marks
Seminar / Quiz 05 marks
Attendence, Punctuality & conduct 05 marks
} ≥ 15 marks

CIA → Total → 30 marks.

End semester examination (ESE) → 3 hours → 70 marks
Part A → 10 compulsory multiple choice questions → 10 × 2 = 20 marks
Part B → 05 short answer type → 04 has to be opt → 04 × 5 = 20 marks
part C → 05 long answer type → 03 has to be answered → 03 × 10 = 30 marks

ESE → Total → 70 marks.

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In the last class we have discussed about the whole course structure for MPHYCC-10 along with JJ Thomson model for atom. Here some questions are listed for assignment:-

1. (a) What subatomic particle did Thomson discover. Mention charge and mass of that particle.

   (b) What is another name of Thomson's atomic model?

   (c) Describe the key features of Thomson's atomic model.

2. Atomic number(Z) is equal to ------
   (a) Number of protons in the nucleus of an atom.
   (b) Number of neutrons
   (c) both (a) & (b)
   (d) None of the above

3. Two atoms are said to isotopes if
   (a) their atomic number is similar.
   (b) their atomic number is similar having different mass number.
   (c) their electron number is similar.
   (d) their neutron number is similar.

4. The mass number of of an element is
   (a) the sum of number of electron & proton.
   (b) the sum of the number of proton & neutron.
   (c) the number of neutrons.
   (d) the number of protons.

5. Which of the following statements about the electron is incorrect
   (a) It is a negatively charged particles.
   (b) the mass of electron is equal to the mass of proton.
   (c) It is a constituent of an atom.
   (d) It is a constituent of cathode ray.

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Hopefully you will enjoy todays class and try to solve the problems given. In the next class I will discuss the limitation of J.J. Thomson's model of an atom alongwith Rutherford's of atomic model, findings & its shortcomings.

Thankyou, Goodbye

We will meet at this time in the next class. If there will be any doubt we can gather at google meet platform for further discussion